

Date: Monday, 11/6/2006 2:40:13 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206/OH-58 SADDLE, INBOARD, RIGHT SIDE  
 Job Number : 29348  
 Estimate Number : 10939  
 P.O. Number : N/A Part Number : D29382  
 This Issue : 11/6/2006 S.O. No. : N/A Drawing Number : D2938 REV B  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : B  
 Previous Run : 28863 Material : N/A  
 Due Date : 11/25/2006 Qty: 12 Um: Each  
 Written By : *[Signature]*  
 Checked & Approved By : *[Signature]*  
 Comment : Est: B 00.06.26 New DWG rev (mpp 2069) EC

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D6101003 7075-T7351 2X6.25X7.875



Comment: Qty.: 1.0000 Each(s)/Unit Total : 10.0000 Each(s)  
 Issue material from stock: 7075-T7351 (QQ-A-250/12)  
 Cut Size 2.0" x 6.25" X 7.88" Grain Along 7.88" Length  
 (D6101-003) Batch No: *B25346* *ml 06/11/16*

2.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

Program part number and batch number.

1-Inspect part number and batch number are programmed correctly.

2-Machine Step No 1 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet

3-Machine Step No 2 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet

4-Machine Step No 3 of Folio and visually inspect as per dwg D2938 & attached Dimension Sheet

5-Deburr

3.0 MILLING CONV. CONVENTIONAL MILLING MACHINE



Comment: CONVENTIONAL MILLING MACHINE

Machine Keyway and inspect per attached dimension sheet

4.0 QC1 INSPECT ALL DIM TO DIM SHEET



Comment: INSPECT ALL DIM TO DIM SHEET

5.0 QC8 SECOND CHECK



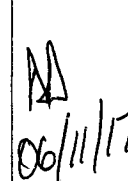




Comment: SECOND CHECK

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/12/12

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06/11/17	2	TOOL RAD FOR FLANGE PCKETING IS R0.188 INSTEAD OF R0.25 0.30	 06/11/17 per QSI 042	USE R0.188 FOR PCKETING PER MARKED UP DWG  SEE DS EMAIL	 06/11/17	 06/11/17	 06/11/17 per QSI 042	 06/12/17

NOTE: Date & initial all entries

Date: Monday, 11/6/2006 2:40:14 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE

Job Number: 29348

Part Number: D29382

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

*a.m*

*06/11/30*

*(12)*

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*a.m / m-b*

*06/12/11*

*(12)*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

*LB 06/12/11*

*(12)*

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

*ST470, ST347*

*LB 06/12/11*

*(12)*

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*LB 06/12/11*

Job Completion



*W 06/12/11*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 29348
<b>Description:</b> 206 Saddle, Outboard, Right side	<b>Part Number:</b> D2938-2
<b>Inspection Dwg:</b> D2938 Rev. B	<b>Page 1 of 1</b>

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. B and record below:

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.100	0.140		0.125	0.124	0.127	0.123		
B	0.100	0.140		0.127	0.125	0.128	0.125		
C	0.100	0.140		0.115	0.110	0.115	0.113		
D	0.210	0.230		0.223	0.222	0.222	0.222		
E	1.245	1.255		1.250	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		0.512	0.511	0.511	0.511		
I	1.572	1.582		1.576	1.576	1.576	1.576		
J	2.495	2.505		2.500	2.499	2.499	2.500		
K	0.257	0.262	<del>DT8683</del>	0.258	0.258	0.258	0.258		
L	0.312	0.317	<del>DT8686</del>	0.314	0.314	0.314	0.314		
M	0.235	0.240		0.237	0.237	0.238	0.237		
N	0.100	0.140		0.118	0.119	0.119	0.119		
O	0.540	0.560		0.545	0.553	0.550	0.556		
P	0.490	0.510		0.500	0.501	0.501	0.500		
Q	3.715	3.725		3.718	3.719	3.720	3.719		
R	2.720	2.760		2.743	2.742	2.742	2.741		
S	0.240	0.270		0.253	0.251	0.251	0.251		
T	0.100	0.180		0.137	0.138	0.146	0.145		
U	1.625	1.635		1.628	1.629	1.629	1.629		
V	1.362	1.372		1.367	1.367	1.367	1.367		
W	0.316	0.321	<del>DT8688</del>	0.320	0.320	0.320	0.320		
X	1.250	1.270		1.260	1.261	1.261	1.262		
Y	1.565	1.585		1.574	1.575	1.575	1.575		
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	am
Date:	06/11/12

Audited by:	JG
Date:	06/11/12

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	29348
<b>Description:</b> 206 Saddle, Outboard, Right side	<b>Part Number:</b>	D2938-2
<b>Inspection Dwg:</b> D2938 Rev. B		Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		.122	.122	.123	.122		
B	0.100	0.140		.121	.120	.121	.122		
C	0.100	0.140		.123	.122	.122	.122		
D	0.210	0.230		.222	.223	.222	.222		
E	1.245	1.255		1.258	1.258	1.258	1.258		
F	1.245	1.255		1.258	1.258	1.258	1.258		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.514	.514	.514	.514		
I	1.572	1.582		1.576	1.577	1.577	1.577		
J	2.495	2.505		2.500	2.501	2.500	2.500		
K	0.257	0.262	<del>D2938</del>	.258	.258	.258	.258		
L	0.312	0.317	<del>D2938</del>	.314	.314	.314	.314		
M	0.235	0.240		.237	.237	.237	.237		
N	0.100	0.140		.120	.120	.119	.119		
O	0.540	0.560		.549	.549	.549	.549		
P	0.490	0.510		.498	.499	.500	.500		
Q	3.715	3.725		3.720	3.720	3.720	3.721		
R	2.720	2.760		2.742	2.742	2.743	2.742		
S	0.240	0.270		.250	.250	.250	.251		
T	0.100	0.180		.140	.140	.140	.146		
U	1.625	1.635		1.629	1.630	1.629	1.630		
V	1.362	1.372		1.367	1.368	1.367	1.367		
W	0.316	0.321	<del>D2938</del>	.319	.319	.319	.319		
X	1.250	1.270		1.262	1.262	1.261	1.260		
Y	1.565	1.585		1.575	1.575	1.575	1.574		
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by:	SD
Date:	06.11.18

Audited by:	J.G
Date:	06/11/29

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	29348
<b>Description:</b> 206 Saddle, Outboard, Right side	<b>Part Number:</b>	D2938-2
<b>Inspection Dwg:</b> D2938 Rev. B		Page 1 of 1

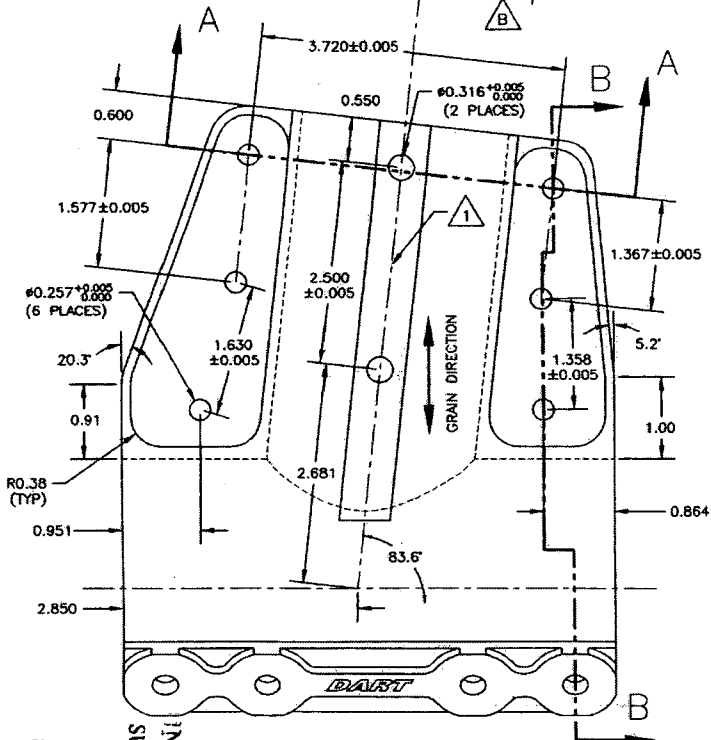
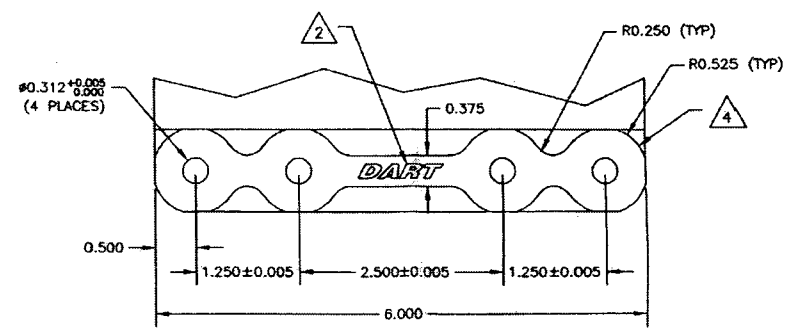
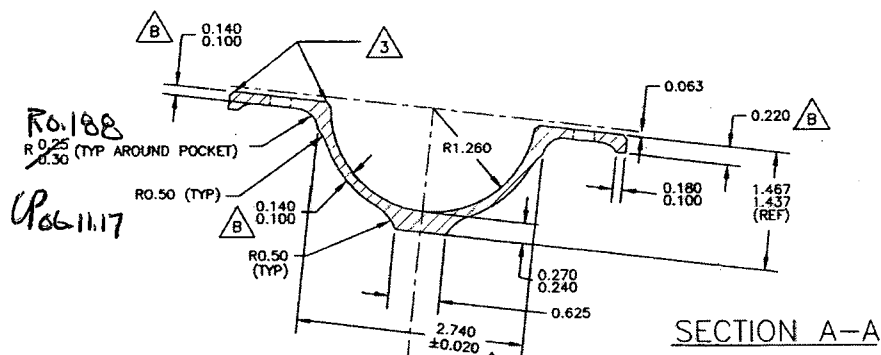
Inspect dimensions highlighted on inspection sheet drawing D2938 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		.123	.122	.123	.123		
B	0.100	0.140		.122	.121	.122	.121		
C	0.100	0.140		.122	.122	.122	.122		
D	0.210	0.230		.222	.222	.222	.221		
E	1.245	1.255		1.258	1.250	1.258	1.258		
F	1.245	1.255		1.258	1.250	1.258	1.258		
G	2.495	2.505		2.500	2.500	2.500	2.500		
H	0.510	0.515		.514	.514	.514	.514		
I	1.572	1.582		1.577	1.577	1.577	1.577		
J	2.495	2.505		2.501	2.500	2.501	2.500		
K	0.257	0.262	<del>DT8688</del>	.258	.258	.258	.258		
L	0.312	0.317	<del>DT8688</del>	.314	.314	.314	.314		
M	0.235	0.240		.237	.237	.237	.237		
N	0.100	0.140		.120	.118	.118	.118		
O	0.540	0.560		.548	.548	.548	.549		
P	0.490	0.510		.498	.497	.498	.500		
Q	3.715	3.725		3.720	3.720	3.720	3.720		
R	2.720	2.760		2.772	2.742	2.742	2.742		
S	0.240	0.270		.251	.251	.250	.250		
T	0.100	0.180		.140	.140	.140	.140		
U	1.625	1.635		1.630	1.630	1.630	1.630		
V	1.362	1.372		1.367	1.367	1.368	1.368		
W	0.316	0.321	<del>DT8690</del>	.318	.318	.318	.318		
X	1.250	1.270		1.262	1.261	1.261	1.261		
Y	1.565	1.585		1.575	1.574	1.574	1.574		
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

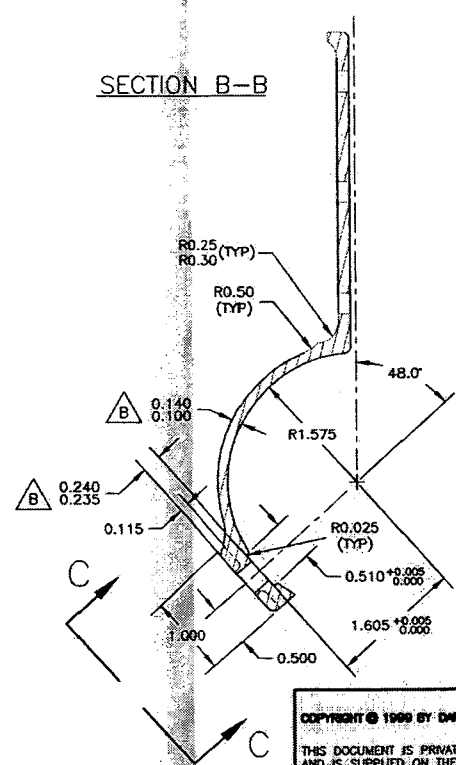
Measured by:	SD
Date:	06.11.18

Audited by:	S-G
Date:	06/11/29

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Reformat; Added Dim. X-Y, DT8683, DT8686, DT8690	KJ/RF	



SECTION B-B



VIEW C-C

D2938-1 LH SADDLE (SHOWN)  
D2938-2 RH SADDLE (OPPOSITE)

MATERIAL: 7075-T7351 (QQ-A-250/12)  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
DART QSI 005 4.3  
BREAK ALL SHARP EDGES 0.010 TO 0.020  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.005 WITH MIN RAD 0.250
- 3 CHAMFER 0.050" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.050" x 45°

RELEASED  
00-05-31

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B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	DRAWN BY	DART DART AEROSPACE USA, INC. BELLUVE, WA
CHECKED	APPROVED	DRAWING NO. D2938
DATE	00.05.29	TITLE SADDLE OUTSIDE
		REV: B SHEET 1 OF 1 SCALE 2:3

NO 2934  
8  
SHOP COPY  
REF TO  
ENGINEERING  
INCONTINUED COPY  
SUB TO A  
SUB TO A  
SUB TO A

## Chris Provencal

---

**From:** David Shepherd [dshepherd@dartaero.com]  
**Sent:** October 19, 2006 3:31 PM  
**To:** 'S Shahbazian'  
**Cc:** 'Provencal, Chris'; 'Charbonneau, Eric'  
**Subject:** RE: Radius dimension on the saddle

Change the drawings. I guess we will also change the 0.313 crosstube hole dimensions as well.  
See D2661 to D2668 as well as D2932 to D2933.

David

---

**From:** S Shahbazian [mailto:sshahbazian@dartaero.com]  
**Sent:** Thursday, October 19, 2006 1:16 PM  
**To:** Shepherd, David  
**Cc:** Provencal, Chris; Charbonneau, Eric  
**Subject:** Radius dimension on the saddle

Dave,  
On attach saddle drawing, according to Eric the marked-up radius that reads 0.30 and 0.25, should be 0.188 since the tooling has been changed long time ago, and apparently they have been machining those radiuses to 0.188 for a while. Do you see a problem with that? if not I will go ahead and change the drawing to reflect the changes.

Serge

--  
No virus found in this incoming message.  
Checked by AVG Free Edition.  
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006

--  
No virus found in this outgoing message.  
Checked by AVG Free Edition.  
Version: 7.1.408 / Virus Database: 268.13.7/488 - Release Date: 10/19/2006